



California Regional Water Quality Control Board

Central Coast Region



Terry Tamminen
*Secretary for
Environmental
Protection*

Internet Address: <http://www.swrcb.ca.gov/rwqcb3>
895 Aerovista Place, Suite 101, San Luis Obispo, California 93401
Phone (805) 549-3147 • FAX (805) 543-0397

Arnold Schwarzenegger
Governor

February 9, 2004

Mr. Richard W. McClure
Olin Corporation
Environmental Remediation Group
PO Box 248
Charleston, TN 37310-0248

Mr. Jay McLaughlin
President and CEO
Standard Fusee Corporation
PO Box 1047
Easton, MD 21601

Dear Mr. McClure and Mr. McLaughlin:

**SLIC: 425 TENNANT AVENUE, MORGAN HILL; ALTERNATIVE WATER SUPPLY
EVALUATION OUTLINE, 425 TENNANT AVENUE FACILITY, SANTA CLARA
COUNTY**

Regional Board staff has reviewed the Alternative Water Supply Evaluation Outline (Outline) submitted January 21, 2003, via email. We appreciate your timely response and continued willingness to respond to our requests. In addition, we have received and considered Outline comments from the Santa Clara Valley Water District (SCVWD) and Cities of Morgan Hill and Gilroy. Those comments are attached for your use and consideration.

Based on our review, we developed several comments that shall be incorporated into the written Alternative Water Supply Evaluation Report (Report) due, April 16, 2004. These comments reflect items contained in your verbal outline provided to us on December 19, 2003. Should you choose not to include one or all of the following points, we request that the Report include your justification for not including them. The points are as follows:

- Section 1.0 – Outline Section 1.0 does not discuss the basis for the evaluation. We believe this would be an appropriate place to address the evaluation basis.
- Section 2.0 - As agreed to during our December 19th meeting, a discussion on the basins up-to-date hydrogeologic model would be appropriate in this section.
- Section 5.0 – The outline has an example evaluation of 10 ppb. It is unclear if you are going to evaluate 10 ppb only or if it is just an example. As agreed to in our December 9th and as outlined in our December 19, 2003 meeting, the evaluation shall include plans for 4, 6, 8, 10, 18, and 40 ppb.
- Section 5.0 – Include implementation time frames for each potential concentration scenario. We understand that implementation time frames will be dependent on many factors, including some that may be out of Olin's direct control. Therefore, time frames that are outside of Olin's direct control shall be highlighted and estimated. Your estimates should also include time frames for community outreach.

California Environmental Protection Agency



Recycled Paper

Pursuant to Section 13267 of the California Water Code, Olin is required to provide the above-requested information by **April 16, 2004**. Failure to submit adequate or complete information may subject you to a Regional Board enforcement action based on the original due date of this letter. The Regional Board requires Olin Corporation to submit the combined report in accordance with Section 13267 of the Water Code to evaluate long-term replacement water issues and further define the extent of perchlorate contamination. We require Olin Corporation to submit the information as the owner of the property and one of the previous operators of a flare manufacturing facility that caused soil and groundwater perchlorate contamination at and in the vicinity of the Olin site at 425 Tennant Avenue, Morgan Hill.

We are enclosing copies of comments received from the SCVWD and the Cities of Morgan Hill and Gilroy via Komex consulting for your review and consideration. If you have any questions, please contact **David Athey at (805) 542-4644** or Eric Gobler at (805) 549-3467.

Sincerely,



Roger W. Briggs
Executive Officer

Enclosures:

1. Santa Clara Valley Water District (email)
2. Komex – For the Cities of Morgan Hill and Gilroy
3. January 16, 2004 – Alternative Water Supply Evaluation Outline

DA: S:\SLIC\Regulated Sites\Santa Clara Co\Olin\OLIN-425 TENNANT AVENUE\COMMUNICATIONS - RICK McCLURE\Long Term Outline Approval.doc

cc:

Mr. Jim Ashcraft
City of Morgan Hill
17555 Peak Avenue
Morgan Hill, CA 95037

Mr. Steven L. Hoch
Hatch & Parent
11911 San Vicente Boulevard, Suite 350
Los Angeles, CA 90049

Mr. Rich Chandler
Komex
2146 Parker Street, Suite B-2
San Luis Obispo, CA 93401

Mr. Eric Lacy
CA Dept. of Health Services
2151 Berkeley Way
Berkeley, CA 94704-1011

Mr. Peter Forest
San Martin County Water District
PO Box 1501
Morgan Hill, CA 95038

Ms. Helene Leichter
City of Morgan Hill
17555 Peak Avenue
Morgan Hill, CA 95037

California Environmental Protection Agency

Mr. Eugene Leung
CA Dept. of Health Services
2151 Berkeley Way
Berkeley, CA 94704-1011

Mr. Bobby Lu
MACTEC Engineering and Consulting
200 Citadel Drive
Los Angeles, CA 90040-1554

Mr. Tom Mohr
Santa Clara Valley
Water District
5750 Almaden Expressway
San Jose, CA 95118-3686

Ms. Suzanne Muzzio
Santa Clara Co. Env. Health Services
1555 Berger Drive, Suite 300
San Jose, CA 95112-2716

Mr. Bill O'Braitis
MACTEC Engineering and Consulting
200 Citadel Drive
Los Angeles, CA 90040-1554

Mr. Keith M. Casto
Sedgwick, Detert, Moran & Arnold
One Embarcadero, 16th Floor
San Francisco, CA 94111-3628

Ms. Lori Okun
State Water Resources Control Board
Office of the Chief Counsel
P. O. Box 100
Sacramento, CA 95812-0100

Mr. Joe Root, General Manager
Corde Valle
One Corde Valle Club Drive
San Martin, CA 95046

Mr. Rob Stern
7510 Kenbrook Place
Suwanee, GA 30024

Sylvia Hamilton
Chair, PCAG
PO Box 886
San Martin, CA 95046



From: "Thomas Mohr" <tmohr@valleywater.org>
To: "David Athey" <DAthey@rb3.swrcb.ca.gov>
Date: 1/29/04 7:31PM
Subject: SCVWD Comments re: Olin Alternative Water Supply Evaluation

Hello David -

We have the following comments on Olin's submittal dated January 16th and entitled "Alternative Water Supply Evaluation".

- 1) We believe the document should be titled, "Water Supply Restoration Plan" to emphasize that the intent of the document is to cause action that will provide a usable water supply to impacted well owners. Submitting an evaluation will not necessarily lead to the actions needed to solve the problem.
- 2) We respectfully request that Olin Corporation refer to the Santa Clara Valley Water District by its full and proper name. "Valley Water District" is not the name of the agency managing the impacted groundwater basin.
- 3) The outline frames the proposed workplan in terms of potential MCL levels for perchlorate. We believe this approach is misguided and will invariably lead to unacceptably long delays while awaiting an MCL. It could be years before an MCL is adopted in either California or at the federal level. We therefore recommend that the Water Supply Restoration Plan be crafted in terms of a perchlorate cleanup level. RWQCB may set a cleanup level for a contaminant release to background levels. We strongly encourage RWQCB to pursue this avenue as the most direct and effective means to require Olin to engage in off-site water supply restoration and cleanup in the near term.
- 4) In item 5 on the list, an example evaluation for a 10 ppb MCL is presented. Community acceptance of or adverse reaction to a cleanup level cannot be ignored. Olin's Water Supply Restoration Plan would be more responsive to the problem at hand by identifying which technical and logistical solutions are most effective for different concentrations. The definition of impacted water supply has already been established at 2 ppb by Olin's action to provide bottled water to users of wells with perchlorate detections at or above 2 ppb. We suggest that a more productive exercise would be evaluation of the optimal configuration to ensure effective and timely water supply restoration to all well owners impacted by perchlorate. Submitting plans to remedy impacts only above a certain level ignores other impacts, such as the mode of concentration of perchlorate in crops, or the economic damage to property values from the taint of perchlorate.

Further, removal of perchlorate from groundwater extracted from operating domestic, agricultural, and municipal production wells will begin the longer term process of restoring the aquifer to permit all beneficial uses of groundwater in the basin.

5) The evaluation should include a discussion of the implementation time frame and community acceptance of the different water supply restoration alternatives.

Thank you for considering our views on this matter.

Best regards,

Tom

Thomas K.G. Mohr
Solvents and Toxics Cleanup Liaison
Santa Clara Valley Water District
408-265-2607x3760; fax 979-5694
Mail: 5750 Almaden Expressway, San Jose CA 95118
Office: 160 Great Oaks Blvd



KOMEX • H2O SCIENCE • INC
2146 PARKER STREET, SUITE B2
SAN LUIS OBISPO, CA 93401-5042, USA
TEL 805.787.0307 FAX 805.787.0309
EMAIL: info@slo.komex.com
WEB SITE: www.komex.com

ENVIRONMENT AND WATER RESOURCES

February 2, 2003
Project No.: 127-005

California Regional Water Quality Control Board,
Central Coast Region
895 Aero Vista Drive, Suite 101
San Luis Obispo, CA 93401
Attn: Mr. David Athey

Re: Comments on "Alternative Water Supply Evaluation Outline, Olin/Standard Fusee Site, Morgan Hill, California"

Dear Mr. Athey,

Komex has performed a review of the document entitled *Alternative Water Supply Evaluation Outline, Olin/Standard Fusee Site, Morgan Hill, California*, dated January 16, 2004, prepared by the Olin Corporation (Olin). We are pleased to submit our comments on behalf of the Cities of Morgan Hill and Gilroy. We also understand that you have received comments from the Santa Clara Valley Water District through Mr. Tom Mohr. We support their comments in their entirety.

The Alternative Water Supply Evaluation Outline (the Outline) is a very brief outline of proposed steps to evaluate providing alternative supplies of drinking water to residents in areas impacted by releases of perchlorate from the former Olin facility in Morgan Hill, California. Such an important document, even as an outline, should have far more substantive analysis and detail.

The most significant problem with the Outline is that it indicates that Olin would like to evaluate alternative water supplies in relation to a range of potential perchlorate maximum contaminant levels (MCLs). The Outline lists potential MCLs of 4, 6, 8, 10, 18, and 40 parts per billion (ppb). No rationale is given for the potential MCLs listed. In regard to evaluating alternative water supplies in relation to MCLs the following points should be considered:

- While there is currently no MCL for perchlorate as was required by the State Legislature, there is some uncertainty when one will be mandated, therefore, establishing the need for alternative water supplies based on MCLs will only serve to delay the delivery of potable water at no additional cost to those who did not create the contamination for considerable time;
- The State Action Level (AL) for perchlorate remains at 4 ppb and until an MCL is established the AL should be considered as a minimum standard for defining impacted water that should be treated or replaced with an alternative supply;
- Olin currently is voluntarily supplying drinking water to residents with domestic water wells that contain perchlorate in concentrations greater than 2 ppb thereby indicating that they consider this even lower level to be the appropriate level to provide an alternative supply; and,
- The California Department of Health Services (DHS) has required the City of Morgan Hill to treat water pumped from the Nordstrom Well in order to remove concentrations of perchlorate down to 2 ppb. It is anticipated that the City of Gilroy will be required to do the same.

Further, we believe that any evaluation of alternative water supplies should also include: 1) the area northeast of the former Olin facility; 2) the operation of the City of Morgan Hill's Tennant Well as an additional water source; and, 3) the evaluation must adopt contingency work currently in progress in Gilroy.

Komex is pleased to provide our comments to the Regional Board. If you have any questions or need additional information please call Rich Chandler at (805) 787-0307 x244.

Sincerely,
KOMEX



Rich Chandler, R.G.
Senior Geologist

cc: Mr. Steve Hoch, Hatch and Parent
Mr. Jim Ashcraft, City of Morgan Hill
Mr. Mike Goodhue, City of Gilroy

OLIN/STANDARD FUSEE SITE
Morgan Hill, California

**Alternative Water Supply Evaluation
OUTLINE**

January 16, 2004

1.0 Information Sources for Alternative Water Supply Evaluation

- MRP perchlorate results
- VWD information of well types and production

2.0 Background

- Perchlorate sampling results
- Types of wells/areas/ production where perchlorate has been reported as present (e.g., single family, colony [small cluster], subdivision supply, industrial supply, agricultural supply, and/or municipal supply wells)
- Range of potential perchlorate MCLs to be used in this evaluation (4, 6, 8, 10, 18, 40 ppb)

3.0 Evaluation Approach.

- Identify wells with sampling results at or above each of the 6 hypothesized potential MCLs.
- Identify potentially feasible water supply options.
- Evaluation detail decreases as potential MCL decreases.

4.0 Water Supply Potential Alternatives Included in Evaluation

- Regional Water Sources (Distribution)
- District Water Sources (Distribution)
- Treatment Systems
 - Regional
 - District
 - Small Cluster
 - Individual

5.0 Example of Evaluation

Potential 10 ppb Perchlorate MCL

- Identify wells at or above hypothesized potential MCL and uses
- Identify well type and production rates including average and peak demands for each type of user
- Identify Regional/District distribution infrastructure in area
- Evaluate well grouping
- Identify potential alternative water supply options
- Identify open issues that impact feasibility (i.e. O&M, certification, etc)